## Making connections to SST1D Audio Transformer Emulator.

Audio transformers in 1920s vintage radios have often gone open circuit over many decades or now have high values of series resistance in the windings due to corroded wiring. Regardless, they no longer perform their intended task of providing plate to grid circuit direct current isolation and the benefit of audio voltage step-up (gain) by having several times more wire turns on the secondary than primary winding. (Usually three to six times more turns than the primary.)

Sometimes only one winding is defective. To prevent undesirable loading of the SST1D board or injecting variable resistance noise from corroded circuits, it is desirable to simply disconnect one end of each winding. You now have two loose wires from the defective transformer. Rather than simply leaving them hanging in space, moved out of the way or clipped off; better to "park" the old wire connection on an insulated "island" placed just a fraction of an inch from the original connection point. That way, there can be little doubt for historians where the original connection was made.

This is accomplished by using a small chip of tinned, double-sided printed circuit board material about  $1/8" \times \frac{1}{2}"$  (3 x 6 mm) in size that is tack soldered to the side of the original connection point to other parts of the circuit. The other side of the chip provides that electrically isolated "island" for you to tack solder (park) the wire to your defective transformer winding.





After completing your work, clean the joint with flux remover and brush on a dab of dull grey acrylic paint to greatly reduce the visibility of your work. Such concealment helps most

viewers to remain focused on the original intent of the makers years ago.

Green arrows are wire to defective audio "parked" on insulated island.

Red arrow is SST1D connection and other side of PCB chip tack soldered to buss wire circuit to other radio components.

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